

**In the Claims**

For the convenience of the Examiner, all pending claims are set forth below, whether or not an amendment is made. Please amend the claims as follows:

1. (Currently Amended) A method for encoding one or more bits, comprising:  
receiving a bit set to encode;  
accessing an encoding lookup table associating a plurality of correlithm objects with a plurality of bit sets, a correlithm object of the plurality of correlithm objects corresponding to a bit set of the plurality of bit sets, each correlithm object comprising a point of an N-dimensional space, each correlithm object randomly generated by randomly selecting one or more values for one or more entries of the each correlithm object, each bit set comprising one or more bits;  
identifying the correlithm object corresponding to the received bit set;  
encoding the received bit set as the identified correlithm object;  
imposing the identified correlithm object;  
recovering the identified correlithm object;  
accessing a decoding lookup table associating the recovered correlithm object with the received bit set; and  
determining the received bit set associated with the recovered correlithm object according to the decoding lookup table.
2. (Original) The method of Claim 1, further comprising:  
using the plurality of correlithm objects as a plurality of tokens; and  
assigning one or more tokens of the plurality of tokens to a token assignee.
3. (Original) The method of Claim 1, wherein imposing the identified correlithm object further comprises performing a computation using the identified correlithm object.
4. (Canceled)

5. (Currently Amended) A system for encoding one or more bits, comprising:  
a memory operable to:  
store a received bit set to encode; and  
store an encoding lookup table associating a plurality of correlithm objects with a plurality of bit sets, a correlithm object of the plurality of correlithm objects corresponding to a bit set of the plurality of bit sets, each correlithm object comprising a point of an N-dimensional space, each correlithm object randomly generated by randomly selecting one or more values for one or more entries of the each correlithm object, each bit set comprising one or more bits; and  
one or more processors coupled to the memory and operable to:  
identify the correlithm object corresponding to the received bit set;  
encode the received bit set as the identified correlithm object;  
impose the identified correlithm object;  
recover the identified correlithm object;  
access a decoding lookup table associating the correlithm object with the received bit set; and  
determine the received bit set associated with the recovered correlithm object according to the decoding lookup table.

6. (Original) The system of Claim 5, the one or more processors further operable to:  
use the plurality of correlithm objects as a plurality of tokens; and  
assign one or more tokens of the plurality of tokens to a token assignee.

7. (Original) The system of Claim 5, the one or more processors further operable to impose the identified correlithm object by performing a computation using the identified correlithm object.

8. (Canceled)

9. (Currently Amended) Logic for encoding one or more bits, the logic embodied in a medium and operable to:

receive a bit set to encode;

access an encoding lookup table associating a plurality of correlithm objects with a plurality of bit sets, a correlithm object of the plurality of correlithm objects corresponding to a bit set of the plurality of bit sets, each correlithm object comprising a point of an N-dimensional space, each correlithm object randomly generated by randomly selecting one or more values for one or more entries of the each correlithm object, each bit set comprising one or more bits;

identify the correlithm object corresponding to the received bit set;

encode the received bit set as the identified correlithm object;

impose the identified correlithm object;

recover the identified correlithm object;

access a decoding lookup table associating the recovered correlithm object with the received bit set; and

determine the received bit set associated with the recovered correlithm object according to the decoding lookup table.

10. (Original) The logic of Claim 9, further operable to  
use the plurality of correlithm objects as a plurality of tokens; and  
assign one or more tokens of the plurality of tokens to a token assignee.

11. (Original) The logic of Claim 9, further operable to impose the identified correlithm object to encode the received bit set by performing a computation using the identified correlithm object.

12. (Canceled)

13. (Currently Amended) A system for encoding one or more bits, comprising:
- means for receiving a bit set to encode;
  - means for accessing an encoding lookup table associating a plurality of correlithm objects with a plurality of bit sets, a correlithm object of the plurality of correlithm objects corresponding to a bit set of the plurality of bit sets, each correlithm object comprising a point of an N-dimensional space, each correlithm object randomly generated by randomly selecting one or more values for one or more entries of the each correlithm object, each bit set comprising one or more bits;
  - means for identifying the correlithm object corresponding to the received bit set;
  - means for encoding the received bit set as the identified correlithm object; and
  - means for imposing the identified correlithm object.

14. (Original) A method for encoding one or more bits, comprising:

- receiving a bit set to encode;
- accessing an encoding lookup table associating a plurality of correlithm objects with a plurality of bit sets, a correlithm object of the plurality of correlithm objects corresponding to a bit set of the plurality of bit sets, each correlithm object comprising a point of an N-dimensional space, each bit set comprising one or more bits, the plurality of correlithm objects randomly generated by randomly selecting one or more values for one or more entries of a correlithm object;
  - using the plurality of correlithm objects as a plurality of tokens;
  - assigning one or more tokens of the plurality of tokens to a token assignee;
  - identifying the correlithm object corresponding to the received bit set;
  - encoding the received bit set as the identified correlithm object;
  - imposing the identified correlithm object, the identified correlithm object imposed to perform a computation using the identified correlithm object;
  - recovering the identified correlithm object;
  - accessing a decoding lookup table associating the recovered correlithm object with the received bit set; and
  - determining the received bit set associated with the recovered correlithm object according to the decoding lookup table.